## WEST VIRGINIA OFFICE OF MINERS' HEALTH, SAFETY & TRAINING

## CHECKLIST FOR INITIAL AND SEMI-ANNUAL MINE MAP APPROVAL

**22A-2-1.** The operator of every underground coal mine shall make, or cause to be made, an accurate map of such mine, on a scale of not less than one hundred, and not more than five hundred feet to the inch.

Company / Mine	e Name:
State ID:	MSHA ID: Date:
Verify with you	r "check mark" that the following map elements are clearly shown on your map:
<u> </u>	Name and address of the mine;
<u>(2)</u>	The scale and orientation (e.g. north arrow) of the map;
<u>(3)</u>	The property or boundary lines of the mine;
<u> </u>	The shafts, slopes, drifts, tunnels, entries, rooms, crosscuts and all other excavations and auger and strip mined areas of the coalbed being mined;
<u>(5)</u>	All drill holes that penetrate the coalbed being mined;
<u>(6)</u>	Name of the coalbed;
(7)	Dip of the coalbed;
<b>(8)</b>	The outcrop of the coalbed within the bounds of the property assigned to the mine;
<u>(9)</u>	The elevations of tops and bottoms of shafts and slopes, and the floor at the entrance to drift and tunnel openings;
[] (10)	The elevation of the floor at intervals of not more than two hundred feet in;
(;	a) At least one entry of each working section, and main and cross entries;
(1	The last line of open crosscuts of each working section, and main and cross sections before such sections and main and cross entries are abandoned;
((	Rooms advancing toward or adjacent to property or boundary lines or adjacent mines;

NOTE: The distance between surveyed elevations must not exceed 200 feet in (a), (b), or (c). Using digital submittal (CD) to supply this information is satisfactory if map scale is > 1"=200'.

(11)	Contour lines passing through whole number elevations of the coalbed being mined, the spacing of such lines not to exceed ten-foot contour intervals, except that a broader spacing of contour lines may be approved for steeply pitching coalbeds by the person authorized so to do under the federal act; and contour lines may be placed on overlays or tracings attached to mine maps;
(12)	As far as practicable the outline of existing and extracted pillars;
	<b>NOTE:</b> Clearly show which sections of the mine were not mapped by physical survey, but were sketched in, and what information was used for their depiction.
(13)	Entries and air courses with the direction of air flow indicated by arrows;
(14)	The location of all surface mine ventilation fans, which location may be designated on the mine map by symbols;
(15)	Escapeways;
(16)	The known underground workings in the same coalbed on the adjoining properties within one thousand feet of such working and projections;
(17)	The location of any body of water dammed in the mine or held back in any portion of the mine, but such bodies of water may be shown on overlays or tracings attached to the mine maps used to show contour lines as provided under section 22A-2-1(10);
(18)	The elevation of any body of water dammed in the mine or held back in any portion of the mine;
(19)	The abandoned portion or portions of the mine that are permanently sealed from mine ventilation;
(20)	The location and description of at least two permanent base line points coordinated with the underground and surface mine traverses, and the location and description of at least two permanent elevation bench marks used in connection with establishing or referencing mine elevation surveys;
(21)	Mines above or below;
(22)	Water pools above;
(23)	The location of the principal streams and bodies of water on the surface

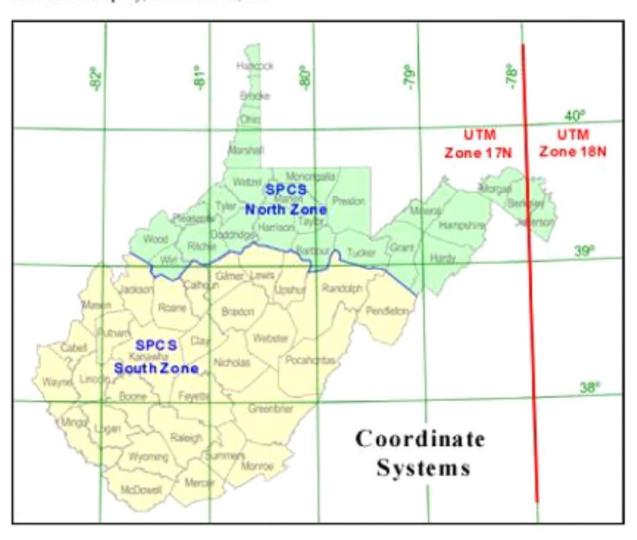
(24) Either producing or abandoned oil and gas wells located within five hundred feet of such mine and any underground area of such mine; (25) The location of all high pressure pipelines, high voltage power lines and principal roads; (26) The location of railroad tracks and public highways leading to the mine, and mine buildings of a permanent nature with identifying names shown; (27) Where the overburden is less than one hundred feet, occupied dwellings; and (28) Such other information as may be required under the federal act or by the Office of Miners' Health, Safety and Training, including the following: Coordinate grid lines in at least one of the following formats: 1. State Plan Coordinate System (SPCS) NAD 27 2. State Plan Coordinate System (SPCS) NAD 83 3. Local mine coordinate system clearly visible. If a local coordinate system is used show LAT / LONG tick marks to at least the nearest second at each of the four (4) corners of each sheet of the mine map, with the spacing between tick marks not to exceed 34". Meridian information (NAD, Zone--see attached map for Zone designation) c. All map features and information required above shall be of sufficient line wt. and text size to be clearly legible for archiving by camera and by scanning. **NOTE:** If thin line weights must be used, avoid pastel colors or colors like cyan or yellow. d. General Location Map index insert showing LAT/ LONG of mine portal(s), County, and USGS quadrangle sheet name. e. State ID# clearly shown on map. f. MSHA ID# clearly shown on map. g. "Opening", "6-month", or "Annual map" stated on map. h. Map certified by RPE or PS(U) licensed in West Virginia

**NOTE:** Show any standing bodies of water, perennial, and intermittent streams.

	i. Date to which extent of mining is certified to be "current"			
	j. Map shows date of latest depicted mining and all mining done to that date.			
	k. Has there ever been a "FINAL MAP" submitted for this mine as a result of a prior company or operator closure and/or re-assignment.			
No [				
Yes	Company Name			
	Date(s)			
	Reason			
	Has there been any production since pre	vious "FINAL MAP".		
	Yes No No			
	1. Submittal information (both required):			
	☐ Hardcopy ☐ Computer disk			
	m. Proposed final mine seals are properly shown as either "wet" or "dry"			
	n. Map bar scale is included			
	o. Map is at a scale of 1"=100' or 1"= 200', unless extent of workings make the map size impractical (more than 4 E-size sheets). NOTE: It is recognized that Chapter 22A-2-1 allows 1"=500'.			
	p. Include a separate .DWG AutoCAD file detailing only the perimeter (footprint) of the mine, which should include all parts of the full mine.			
	(29) Engineer sign off 1	Date:		
	(30) Inspector sign off 2	Date:		

<sup>&</sup>lt;sup>1</sup> This is so we know who completed the checklist. This is not a re-certification of the certified mine map being submitted. <sup>2</sup> This is the inspector at the Regional Office who has compared the signed checklist and map for completeness.

1991. West Virginia Association of Land Surveyors. "West Virginia Land Surveyors Laws and Regulations." The Michie Company, Charlottesville, VA.



Location Map for SPCS and UTM "Zones"